

Appl. No. 10/623,020
Amendment dated November 21, 2006

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (original): A composition of matter having a formula represented by



wherein x is an integer of about 8 to about 1,200, X is a linker, and Y is a residue of a sterol comprising a 3-ol group.

Claim 2 (original): The composition of matter of claim 1 wherein x is about 581.

Claim 3 (original): The composition of matter of claim 1 wherein X is $-\text{O}-\text{CO}-$.

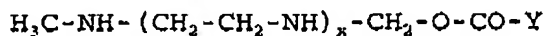
Claim 4 (original): The composition of matter of claim 1 wherein Y is a cholesterol residue.

Claim 5 (original): The composition of matter of claim 1 wherein Y is a member selected from the group consisting of residues of cholesterol, cholestanol, coprosterol, epicholestanol, epicholesterol, ergostanol, α -ergosterol, β -ergosterol, γ -

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ergosterol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3 β)-7-dehydrocholesterol, desmosterol, allocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol, campesterol, α_1 -sitosterol, β -sitosterol, γ -sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and dehydroergosterol.

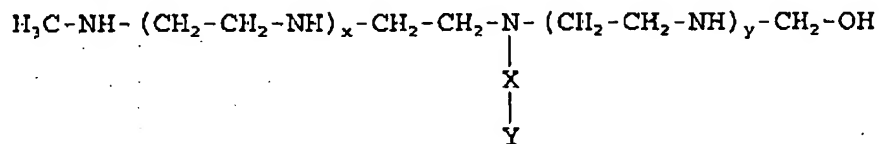
Claim 6 (original): A composition of matter having a formula represented by



wherein x is an integer of about 8 to about 1,200, and Y is a cholesterol residue.

Claim 7 (original): The composition of matter of claim 6 wherein x is about 581.

Claim 8 (original): A composition of matter having a formula represented by



wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, X is a linker, and Y is a residue of a sterol comprising a 3-ol group.

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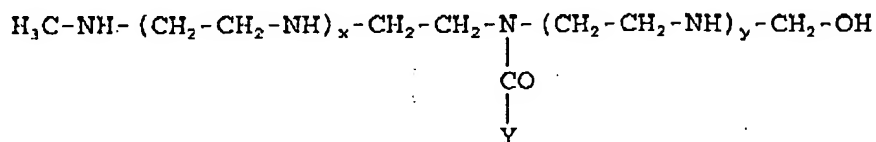
Claim 9 (original): The composition of matter of claim 8 wherein $x + y$ is about 581.

Claim 10 (original): The composition of matter of claim 8 wherein X is -CO-.

Claim 11 (original): The composition of matter of claim 8 wherein Y is a cholesterol residue.

Claim 12 (original): The composition of matter of claim 8 wherein Y is a member selected from the group consisting of residues of cholesterol, cholestanol, coprosterol, epicholestanol, epicholesterol, ergostanol, α -ergosterol, β -ergosterol, γ -ergosterol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3 β)-7-dehydrocholesterol, desmosterol, allocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol, campesterol, α_1 -sitosterol, β -sitosterol, γ -sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and dehydroergosterol.

Claim 13 (original): A composition of matter having a formula represented by

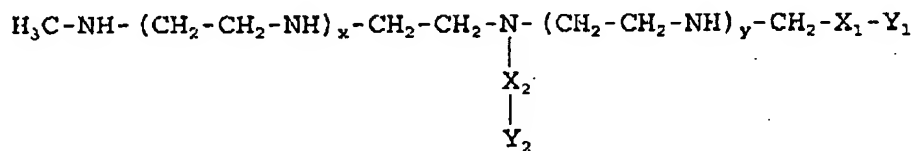


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wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, and Y is a cholesterol residue.

Claim 14 (original): The composition of matter of claim 13 wherein x + y is about 581.

Claim 15 (original): A composition of matter having a formula represented by



wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, X₁ and X₂ are linkers, and Y₁ and Y₂ are residues of a sterol comprising a 3-ol group.

Claim 16 (original): The composition of matter of claim 15 wherein x + y is about 581.

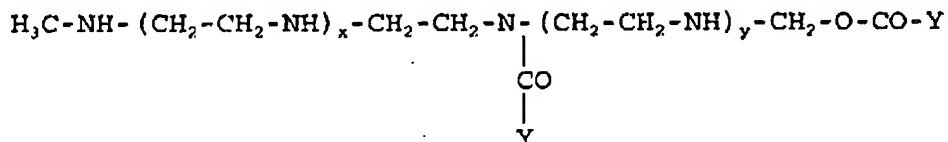
Claim 17 (original): The composition of matter of claim 15 wherein X₁ is -O-CO- and X₂ is -CO-.

Claim 18 (original): The composition of matter of claim 15 wherein Y₁ and Y₂ are cholesterol residues.

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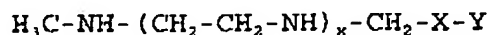
Claim 19 (original): The composition of matter of claim 15 wherein Y_1 and Y_2 are members independently selected from the group consisting of residues of cholesterol, cholestanol, coprosterol, epicholestanol, epicholesterol, ergostanol, α -ergosterol, β -ergosterol, γ -ergosterol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3 β)-7-dehydrocholesterol, desmosterol, allocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol, campesterol, α_1 -sitosterol, β -sitosterol, γ -sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and dehydroergosterol.

Claim 20 (original): A composition of matter having a formula represented by



wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that $x + y$ is about 8 to about 1,200, and Y is a cholesterol residue.

Claim 21 (original): A complex comprising a mixture of a nucleic acid and a composition of matter having a formula represented by



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wherein x is an integer of about 8 to about 1,200, X is a linker, and Y is a residue of a sterol comprising a 3-ol group.

Claim 22 (original): The complex of claim 21 wherein x is about 581.

Claim 23 (original): The complex of claim 21 wherein X is -O-CO-.

Claim 24 (original): The complex of claim 21 wherein Y is a cholesterol residue.

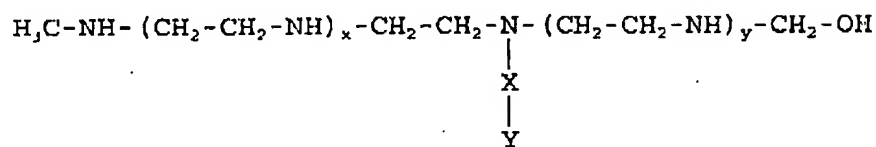
Claim 25 (original): The complex of claim 21 wherein X is -O-CO- and Y is a cholesterol residue.

Claim 26 (original): The complex of claim 21 wherein Y is a member selected from the group consisting of residues of cholesterol, cholestanol, coprosterol, epicholestanol, epicholesterol, ergostanol, α -ergostenol, β -ergostenol, γ -ergostenol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3 β)-7-dehydrocholesterol, desmosterol, allocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol, campesterol, α -sitosterol, β -sitosterol, γ -sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and dehydroergosterol.

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Claim 27 (original): The complex of claim 21 wherein the nucleic acid comprises a plasmid.

Claim 28 (original): A complex comprising a mixture of a nucleic acid and a composition of matter having a formula represented by:



wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, X is a linker, and Y is a residue of a sterol comprising a 3-ol group.

Claim 29 (original): The complex of claim 28 wherein x + y is about 581.

Claim 30 (original): The complex of claim 28 wherein X is -CO-.

Claim 31 (original): The complex of claim 28 wherein Y is a cholesterol residue.

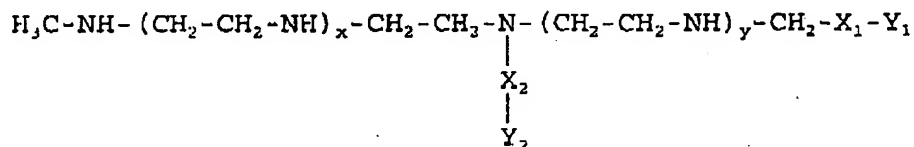
Claim 32 (original): The complex of claim 28 wherein X is -CO- and Y is a cholesterol residue.

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Claim 33 (original): The complex of claim 28 wherein Y is a member selected from the group consisting of residues of cholesterol, cholestanol, coprosterol, epicholestanol, epicholesterol, ergostanol, α -ergostenol, β -ergostenol, γ -ergostenol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3 β)-7-dehydrocholesterol, desmosterol, allocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol, campesterol, α -sitosterol, β -sitosterol, γ -sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and dehydroergosterol.

Claim 34 (original): The complex of claim 28 wherein the nucleic acid comprises a plasmid.

Claim 34 ~~35~~ (currently amended): A complex comprising a mixture of a nucleic acid and a composition of matter having a formula represented by



wherein x is an integer of about 0 to about 1,200, y is an integer of about 0 to about 1,200, with the proviso that x + y is about 8 to about 1,200, X₁ and X₂ are linkers, and Y₁ and Y₂ are residues of a sterol comprising a 3-ol group.

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Claim ~~35~~ 36 (currently amended): The complex of claim ~~34~~ 35 wherein $x + y$ is about 581.

Claim ~~36~~ 37 (currently amended): The complex of claim ~~34~~ 35 wherein X_1 is -O-CO- and X_2 is -CO-.

Claim ~~37~~ 38 (currently amended): The complex of claim ~~34~~ 35 wherein Y_1 and Y_2 are cholesterol residues.

Claim ~~38~~ 39 (currently amended): The complex of claim ~~34~~ 35 wherein X_1 is -O-CO-, X_2 is -CO-, and Y_1 and Y_2 are cholesterol residues.

Claim ~~39~~ 40 (currently amended): The complex of claim ~~34~~ 35 wherein Y_1 and Y_2 are members independently selected from the group consisting of residues of cholesterol, cholestanol, coprosterol, epicholestanol, epicholesterol, ergostanol, α -ergosterol, β -ergosterol, γ -ergosterol, ergosterol, 22,23-dihydroergosterol, stigmasterol, stigmastanol, (3 β)-7-dehydrocholesterol, desmosterol, allocholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol, campesterol, α_1 -sitosterol, β -sitosterol, γ -sitosterol, lumisterol, pyrocalciferol, isopyrocalciferol, azacosterol, neoergosterol, and dehydroergosterol.

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Claim ~~40~~ 53 (currently amended): The complex of claim ~~34~~ 35
wherein the nucleic acid comprises a plasmid.

Claims 41-52 (canceled)